

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/063,042	03/14/2002	Jason T. Lenz	\$63.2-10057	2208
490	7590 03/31/2005	·	EXAMINER	
	RRETT & STEINKRAU	WEBB, SARAH K		
6109 BLUE CIRCLE DRIVE SUITE 2000		ART UNIT	PAPER NUMBER	
	IKA, MN 55343-9185	•	3731	
			DATE MAILED: 03/31/200:	ς .

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comments	10/063,042	LENZ, JASON T.				
Office Action Summary	Examiner	Art Unit				
*	Sarah K Webb	3731				
The MAILING DATE of this communication appo Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period with the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be timwithin the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nety filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 09 Ju	ly 2004.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	·					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-29 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-29</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on 14 March 2002 is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex						
The path of declaration is objected to by the Ex-	animier, Note the attached Office	Action of format 10-132.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	•	ed in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
: •	•					
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate Patent Application (PTO-152)				
Paper No(s)/Mail Date 7/9/04.	6) Other:	(- (- (- (- (- (- (- (- (- (- (- (				

# Page 2

#### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to clearly show the details of the splines, reciprocating splines, and gaps as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). The details of the splines, reciprocating splines, gaps, and longitudinal connectors should be very clearly illustrated since they are essential elements in the stent pattern. It is also unclear from the drawings the difference between a "longitudinal connector" and a "spline."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/063,042 Page 3

Art Unit: 3731

### Claim Rejections - 35 USC § 112

2. Claims 11, 22,25 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 22 recite the limitations "each spline contacts a trough" and "each reciprocating spline contacts a peak region." Since independent claim 1 recites that there is a gap between splines and adjacent bands, this limitation contradicts claim 1. Therefore, it is indefinite.

Claim 25 recites the limitation "the segmented spine" in line 1, and claim 27 recites this limitation in line 2. There is insufficient antecedent basis for this limitation in the claims.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1,13-15, and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,800,526 to Anderson et al.

Anderson discloses a stent pattern in Figure 1 that includes a plurality of serpentine bands with alternating peaks and troughs. There are "splines" (20)

Art Unit: 3731

extending from some of the peaks (as viewed upside-down). The splines (20) are separated from the adjacent bands by gaps. The bands are connected by members 14.

4. Claims 1-6, 13-17, and 24-29 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,540,777 to Stenzel.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Figure 1 discloses a stent pattern with a plurality of serpentine bands (106) with alternating peaks (108) and troughs (110). There are "splines" extending from some of the peaks and troughs. The splines (118) are separated from the adjacent bands by gaps. Pincers (112) are considered to meet the limitation "reciprocating splines", as they extend toward "splines" (118). The pattern includes two configurations of the splines and reciprocating splines: a) the spline (118) extends from a peak and the reciprocating spline (112) extends from a trough; (b) the spline (118) extends from a trough and the reciprocating spline (112) extends from a peak. A plurality of the splines is aligned in a longitudinal direction. Adjacent bands are connected by a plurality of "longitudinal connectors" (126,124), which also form a portion of a "segmented spine." Figure 17 shows an embodiment where the splines and reciprocating splines may extend from the sides of peaks/troughs.

Application/Control Number: 10/063,042 Page 5

Art Unit: 3731

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 7-10,12,18-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stenzel in view of WO 00/30563 (Brown).

Stenzel fails to form the serpentine bands to alternate between different wavelengths and amplitudes. Brown discloses a stent structure in Figure 2 with serpentine bands connected by longitudinal connectors. Brown teaches that forming alternating bands to have different wavelengths and amplitudes avoids the problem of pinching and overlap between adjacent bands (pages 2-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the bands of the Stenzel stent to alternate between different wavelengths and amplitudes, as taught by Brown, in order to avoid pinching and overlap.

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,511,491 discloses a stent structure with reciprocating "splines."
- 7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/063,042

Page 6

Art Unit: 3731

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K Webb whose telephone number is (571) 272-4706. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKW 3/29/05 SKW

JULIAN W. WOO
PRIMARY EXAMINER

Julian M. Moo